

MAGNETIC RESONANCE IMAGING METHOD AND APPARATUS FOR BODY COMPOSITION ANALYSIS

Abstract

A method is disclosed for analyzing body composition. The method includes inducing a static magnetic field in the body. The static magnetic field has a known distribution along a longitudinal axis of the body. A radio frequency magnetic field is induced in the body. The radio frequency and a bandwidth thereof are selected to induce nuclear magnetic resonance phenomena in a selected axial segment along the body. Nuclear magnetic resonance phenomena are from the selected axial segment. Composition is determined from the magnetic resonance signals. The measurement may be repeated in different axial segments by changing the static field amplitude or a frequency of the RF magnetic field. In some embodiments, a gradient field is superimposed over the static field.